

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C.**

In the matter of	)	
	)	
Amendment of Sections 74.1204(a) and 73.807 of the	)	RM - 11099
Commission's Rules	)	
	)	

**COMMENTS OF REC NETWORKS**

REC Networks ("REC") has been an advocate for the Low Power FM (LPFM) radio service dating back to the original petitions for rulemaking. Today, REC continues to be the leading provider of information and engineering data to LPFM applicants, prospective applicants and stations. REC is also involved in spectrum issues that would impact the access of broadcast bands to private citizens, especially in our Area of Interest of Southern California, Arizona and Nevada<sup>1</sup>.

REC is deeply concerned with the above captioned petition filed by the New Jersey Broadcasters Association ("NJBA") as it relates to the Low Power FM (LPFM) services and allegations made by NJBA about the service. However, REC does agree in part with NJBA on their allegations made regarding the impact of new FM translators to local full power and low power broadcasting in the state of New Jersey.

**LPFM is caught in the crossfire**

Ever since the LPFM service was created, it seemed that NJBA has had it in for LPFM. This is evidenced in the "rider" on the proposed legislation that would eliminate the third adjacent channel restrictions for LPFM. The rider would specifically exclude New Jersey from receiving relief for third adjacent protection. While we read the comments made by NJBA in this

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<sup>1</sup> - While our "area of interest" is in the southwestern United States, REC involves itself in matters that have an overall impact on Commission policy regarding the LPFM service as a whole.

proceeding, the problem seems to be mainly with applications filed during the "Great Translator Invasion" window of March, 2003<sup>2</sup> and not the LPFM service.

### **NJBA's allegations of LPFM**

Without any factual evidence of interference by New Jersey or adjacent state LPFM stations, NJBA has gone on the warpath against LPFM in this proceeding recommending that commercial FMs licensed to communities in New Jersey be protected to the 44 dBu (F 50,50) contour, impose additional second adjacent channel restrictions, ban LP-10 and makes perceived notions about the LPFM service, which although may be legally possible do not reflect the nature of most LPFM stations.

### **NJBA's proposed 44 dBu protection**

In their petition<sup>3</sup>, NJBA wants the Commission to expand the protection by secondary LPFM and FM Translators out to 44 dBu. While we can understand some of the "anomalies" in New Jersey, we feel that this protection is motivated solely by profit. The additional 10 to 14 dBu of protection NJBA is asking for is protection outside a station's service contour. This is protection that they are not entitled to in the first place.

Class A, B1 and B stations are protected to their protected contours of 28.3km, 44.7km and 65.1km respectively assuming full facilities<sup>4</sup>. Because of the population density of New Jersey, it's close proximity to large metro areas such as New York and Philadelphia and existing Commission policy on allotments, many stations, especially Class A stations would not be able to achieve full facilities. The average New Jersey Class A station actually operates with a field strength about 3 dB lower than maximum facilities<sup>5</sup>.

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<sup>2</sup> - *Public Notice, FM Translator Auction Filing Window and Application Freeze*, DA 03-359, (February 6, 2003).

<sup>3</sup> - *Petition* at 46.

<sup>4</sup> - §73.210.

<sup>5</sup> - Also as NJBA has pointed out, many New Jersey stations are directional thereby limiting their field strength in certain directions even further.

With that in mind, we need to remind NJBA that LPFM stations are required to protect all Class A, B1 and B stations in New Jersey *assuming that they operate at full facilities with non-directional antennas*.<sup>6</sup> This means that all Class-A stations in the United States are treated as if they are 6kW at 100M HAAT omnidirectional. As shown in Appendix C, the LPFM service already overprotects most New Jersey FM stations by at least 3 dB adding an average of 5 km to the existing 20km "buffer zone".

We remind NJBA that full power FM stations are licensed to be a trustee of the public to serve the *city of license*.<sup>7</sup> An FM station's primary concern should be the city of license. Any coverage outside the city of license especially any coverage outside the station's protected service contour is incidental and should be considered a gift by the law of physics.

### **The truth about LPFM stations**

NJBA alleges that the LPFM service is inferior to New Jersey *commercial* stations since they are only required to operate "10 hours per day". This statement is inaccurate since §73.850 requires LPFM stations to operate at least 5 hours per day, 6 days a week with a minimum 36 hours per week. We need to remind NJBA that this is the same schedule expected of non-commercial educational (NCE) full power and Class-D FM broadcasters as outlined in §73.561. We remind NJBA that the LPFM service is a *non-commercial* service and it's broadcast schedule obligations are consistent with other non-commercial stations. Many LPFM stations, such as WLNT-LP in Loudon, TN operate 24 hours a day, 7 days a week while a large majority of LPFM stations operate schedules well in excess of the legal minimum.

NJBA also alleges that LPFM stations have "no EAS obligations". This is also not correct. LPFM stations are required to maintain a functional FCC type certified EAS decoder. This is similar to those required of LPTV and cable systems. Many LPFM stations have reported to REC that they participate in EAS. For example, WVJW-LP in Benwood, WV airs all EAS

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<sup>6</sup> - §73.807.

<sup>7</sup> - §73.315(a).

messages for ten different counties in three states. Between August 1 and October 20 of this year, WVJW-LP retransmitted 103 EAS messages.

NJBA alleges that LPFM detracts from "localism in the New Jersey anomaly environment". §73.853 requires that all applicants for a period of two years from when LPFM licenses were first made for application must be physically located within 10 miles of the LPFM station's transmitting antenna. Since there has been only one LP-100 window opened in New Jersey, all LPFM applicants so far are required to meet this localism requirement<sup>8</sup>. Additional consideration is given to applicants who have pledged to broadcast at least 8 hours of local programming every day. Currently, New Jersey has 4 LPFM stations on the air and 2 additional stations under construction.

### **The LPFM issue is moot in New Jersey**

NJBA wishes to place these restrictions to protect New Jersey broadcasters from new LPFM stations. Unfortunately, the same problems that New Jersey full-power FM stations, especially the underpowered Class A stations are facing are also being faced by potential LPFM applicants. Every week REC conducts a survey of the top-1,000 Census designated locations that can accommodate an LPFM channel. Of those 1,000 communities, there were no New Jersey communities on the LP-100 list.<sup>9</sup> 4 New Jersey communities<sup>10</sup> are on the LP-10 list<sup>11</sup>. Even if the third adjacent channel restrictions were lifted, there would be a very limited area where LPFM would be available in New Jersey.<sup>12</sup>

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<sup>8</sup> - When the first LP-10 window opens, applicants will also be subject to the same local presence requirements.

<sup>9</sup> - See <http://www.recnet.com/cgi-bin/lpfm/top1000.cgi?low=1>

<sup>10</sup> - Bridgeton, Point Pleasant, Brigantine and Mystic Island, NJ.

<sup>11</sup> - See <http://www.recnet.com/cgi-bin/lpfm/top1000l2.cgi?low=1>

<sup>12</sup> - See Appendix A for LP-100 stations and Appendix D for LP-10 stations.

### **Translators - The real problem in New Jersey**

REC does agree in part to NJBA's allegations regarding the potential for potential interference by FM translators to New Jersey's FM stations. However, NJBA's concerns are not exclusive to New Jersey.

Unlike LPFM stations, FM Translators have no local ownership requirements. In fact a majority of the translator applications filed in the "Great Translator Invasion" window of March 2003 were from a small number of groups, many of which have no full power or even reserved band satellite translator stations that can be received in New Jersey, some did not even have a full power station at the time of the window. Many of them are banking on a different rulemaking that would open the non-reserved band to satellite-fed translators.

Unlike LPFM stations, FM Translators have no *local* EAS requirements. It is not uncommon to be listening to a satellite-fed translator and hear an EAS message for Twin Falls, Idaho but you are not able to hear them for your community. As we have shown, LPFM operators are proud to serve their communities by voluntarily rebroadcasting local EAS messages and Amber alerts.

Most importantly is the matter of interference and protection. While LPFM assumes every full power station as a non-directional facility operating maximum facilities, FM Translators regard each FM facility based on their exact parameters taking into consideration exact service contours including directional antennas, which are used by several full-power FM stations in New Jersey. While LPFM stations fully respect a full power's second adjacent channel, translators are able to be placed on a second adjacent channel using the claim that "the interference never reaches the ground".

### **A better concept for protecting the New Jersey Anomaly**

REC feels that New Jersey LPFM stations are just as local as any other New Jersey non-commercial station and therefore should be able to have their voices heard. We ask the Commission to impose no new regulations or restrictions on the operation of LP-100 or LP-10 stations in New Jersey as well as continue processing existing applications.

We feel that FM Translators that have an overall primary station outside of the state of New Jersey should be subject to additional limitations. New Jersey non-reserved band FM stations (commercial and non-commercial) should be treated as non-directional stations operating with maximum facilities. In addition to the existing 60/57/54 dBu "full facility" protected service contour of the New Jersey FM stations, an additional 20 km buffer zone should be added. This would give a Class A station in New Jersey a protected service contour of 48.3 km non-directional. This includes WBHX, which currently enjoys only 16.9 km of protection right now.

If the Commission wants to consider making a proposed rulemaking on a larger scale than what can be perceived as a "special interest" proposal that would benefit only New Jersey, the Commission can consider placing this non-directional "buffer zone" rule on all "distant translators". A "distant translator" is one who's overall primary station is at least 450 km away and in a different state than the translator.

### **Conclusion**

While REC recognizes that New Jersey has a unique geography that has put it in a position that makes it feel "short changed" because of its adjacency to the #1 and #4 markets, we feel that the few possible LPFM stations can be a worthwhile contributor to New Jersey's dialscape. While we can understand the New Jersey broadcaster's desire to maintain their coverage area, we do not feel that it should be at the expense of placing diverse voices in areas outside the full power station's primary (entitled) coverage areas. NJBA has made absolutely no showing that any LPFM application or station has created any actual or predicted interference within New Jersey.

NJBA has made a sufficient showing on how an FM translator, a service operating under much more relaxed distance separation rules than LPFM can cause interference, especially on a second adjacent channel. REC's proposed rules for FM Translators not only address New Jersey's distinctive environment but also place a priority on local full power and low power New Jersey broadcasters.

Based on this, REC requests that the Commission DENY IN PART the above captioned petition as it relates to the LPFM service and CONSIDER additional restrictions on new FM translators on either a statewide or nationwide basis. REC will support a FREEZE on all FM translator applications that are still pending action pending the outcome of this proceeding as well as other proceedings.

Respectfully Submitted,

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## **APPENDIX A**

### **AVAILABILITY OF LP-100 STATIONS IN NEW JERSEY**

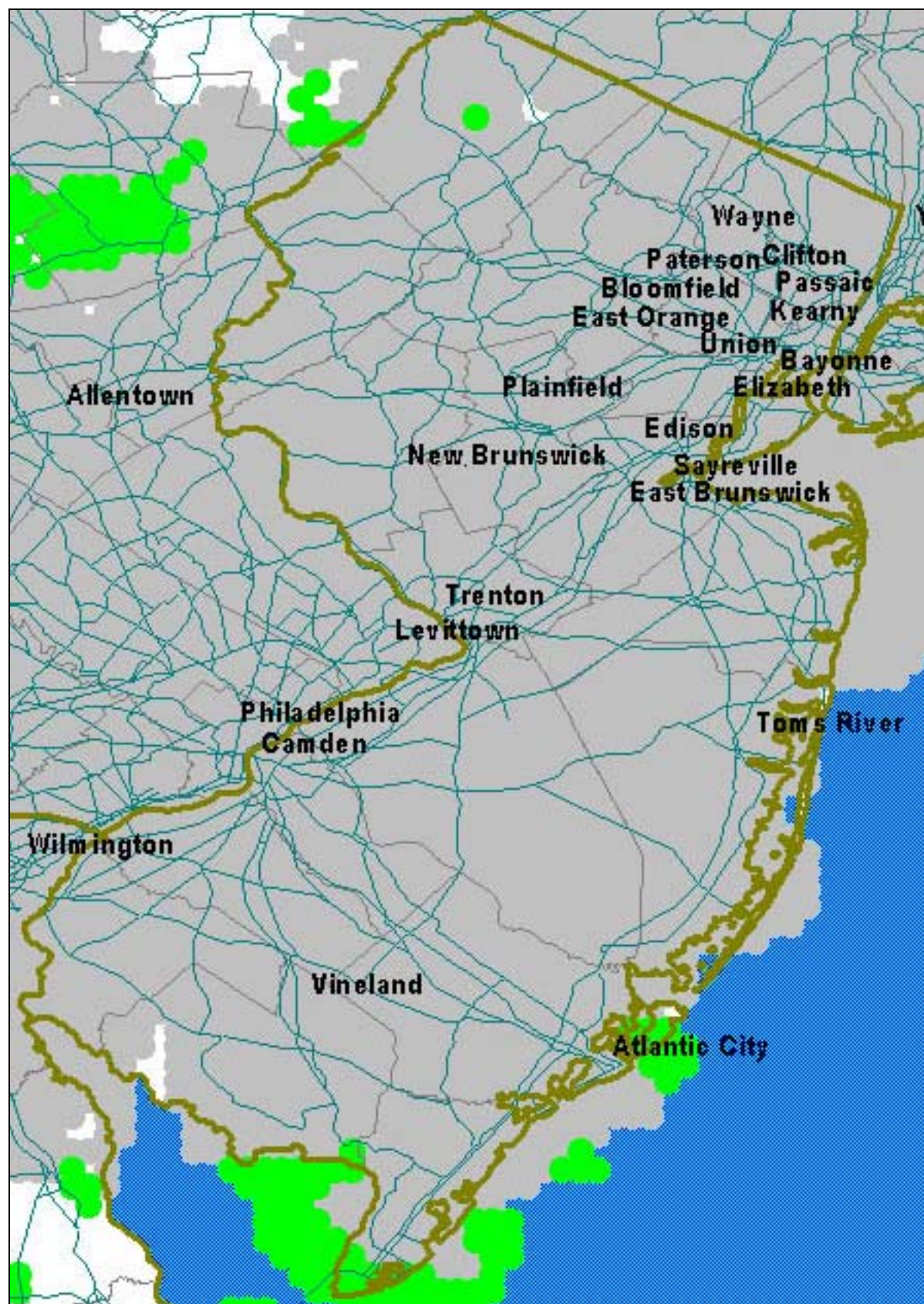
NOTE: This is the same map that we used in our comments on the MITRE report on the elimination of third-adjacent channel protections by LPFM stations.

Areas that are in gray are those where LP-100 stations are currently not available, even with third adjacent channel protection.

Areas in green are currently unavailable for LP-100 but would be available without third adjacent channel protection.

Areas in white (without color) are available for LP-100, even with third adjacent channel protections.





## **APPENDIX B**

### **LISTING OF NON-RESERVED BAND STATIONS IN NEW JERSEY AND HOW THE CURRENT LPFM RULES OVERPROTECT THESE STATIONS**

**NOTE: THESE FIGURES DO NOT INCLUDE THE LPFM "BUFFER ZONE"**

Call	Class	Facility	Lat	Lon	Actual Contour	Max for Class	kW	HAAT	dB prot by LPFM	LPFM over-protect
WVLT	A	11974	39.498	75.075	28.3 km	28.3 km	6	100	60	0
WOBM-FM	A	59508	39.875	74.164	24.2 km	28.3 km	1.4	148	57	3
WDTH	A	32201	39.009	74.87	21.5 km	28.3 km	4.2	66	54.7	5.3
WJLK-FM	A	14907	40.229	74.09	24.1 km	28.3 km	1.3	152	56.9	3.1
WWZK	A	16910	39.13	74.789	23.6 km	28.3 km	3.3	91	56.5	3.5
WRAT	A	59530	40.171	74.028	22.3 km	28.3 km	4	73	55.4	4.6
WTTH	A	40030	39.351	74.449	26.0 km	28.3 km	2.8	122	58.3	1.7
WMGQ	A	55179	40.476	74.493	24.2 km	28.3 km	1.2	160	57	3
WTKU	A	3139	39.205	74.659	28.3 km	28.3 km	6	100	60	0
WBBO	A	59495	39.716	74.292	28.1 km	28.3 km	2.95	142	59.8	0.2
WCZT	A	39914	38.996	74.839	28.3 km	28.3 km	6	100	60	0
WZBZ	A	1306	39.376	74.452	24.2 km	28.3 km	3	100	57	3
WBHX	A	56233	39.561	74.241	16.9 km	28.3 km	5.6	33	50	10
WJRZ-FM	A	31078	39.798	74.203	23.8 km	28.3 km	1.6	133	56.6	3.4
WJKS	A	51136	39.431	75.337	24.1 km	28.3 km	0.8	195	56.9	3.1
WSUS	A	74077	41.144	74.539	24.2 km	28.3 km	0.59	227	57	3
WAIV	A	37475	39.009	74.87	23.2 km	28.3 km	3.2	89	56.2	3.8
WJSE	A	51575	39.205	74.659	23.5 km	28.3 km	3.3	90	56.4	3.6
WGBZ	A	40031	39.126	74.824	23.5 km	28.3 km	3.3	90	56.4	3.6
WDHA-FM	A	49587	40.855	74.512	24.1 km	28.3 km	0.98	175	56.9	3.1
WHCY	A	11984	41.048	74.973	24.0 km	28.3 km	0.43	262	56.9	3.1
WKOE	A	49984	39.229	74.682	23.5 km	28.3 km	3	94	56.4	3.6
WHTG-FM	A	72324	40.278	74.081	23.8 km	28.3 km	1.1	161	56.6	3.4
WDOX	A	72113	38.959	74.923	20.5 km	28.3 km	3	71	53.9	6.1
WWZY	A	32983	40.305	73.986	28.3 km	28.3 km	5	110	60	0
WSNJ-FM	A	12211	39.953	75.168	26.5 km	28.3 km	0.55	252	57.6	2.4
WNNJ-FM	B1	25413	41.187	74.768	41.5 km	44.7 km	2.3	272	55.3	1.7
WOJZ	B1	57357	39.547	74.639	44.6 km	44.7 km	10	155	57	0
WCHR-FM	B1	24934	39.716	74.292	45 km	44.7 km	13	140	57.1	-0.1
WCAA	B1	46978	40.748	73.986	36.4 km	44.7 km	0.61	373	52.6	4.4
WPUR	B1	54894	39.361	74.418	44.9 km	44.7 km	13.5	137	57.1	-0.1
WPAT-FM	B	51663	40.748	73.986	65.8 km	65.1 km	5.4	433	54.3	-0.3
WTHK	B	25013	40.189	74.846	65 km	65.1 km	50	150	54	0
WFME	B	20886	40.788	74.255	65 km	65.1 km	37.2	174	54	0
WAYV	B	3125	39.381	74.451	57.2 km	65.1 km	50	101	50	4
WFPG-FM	B	10449	39.378	74.448	58.9 km	65.1 km	50	110	51.2	2.8
WIXM	B	72981	39.321	74.771	63.9 km	65.1 km	50	142	53.5	0.5
WPST	B	47427	40.235	74.767	62.3 km	65.1 km	50	131	52.8	1.2
WAWZ	B	52601	40.611	74.57	64.8 km	65.1 km	28	200	53.8	0.2
WHTZ	B	59953	40.748	73.986	65.7 km	65.1 km	6	415	54.2	-0.2
WZXL	B	70260	39.124	74.766	54.8 km	65.1 km	38	101	49.2	4.8
WKXW-FM	B	53458	40.283	74.686	65.5 km	65.1 km	15.5	275	54.2	-0.2
WPRB	B	53567	40.283	74.689	60.3 km	65.1 km	14	223	51.8	2.2
WMGM	B	61100	39.39	74.512	58.2 km	65.1 km	50	106	50.9	3.1
WSNJ-FM	B	12211	39.953	75.168	53.5 km	65.1 km	15	148	48.6	5.4

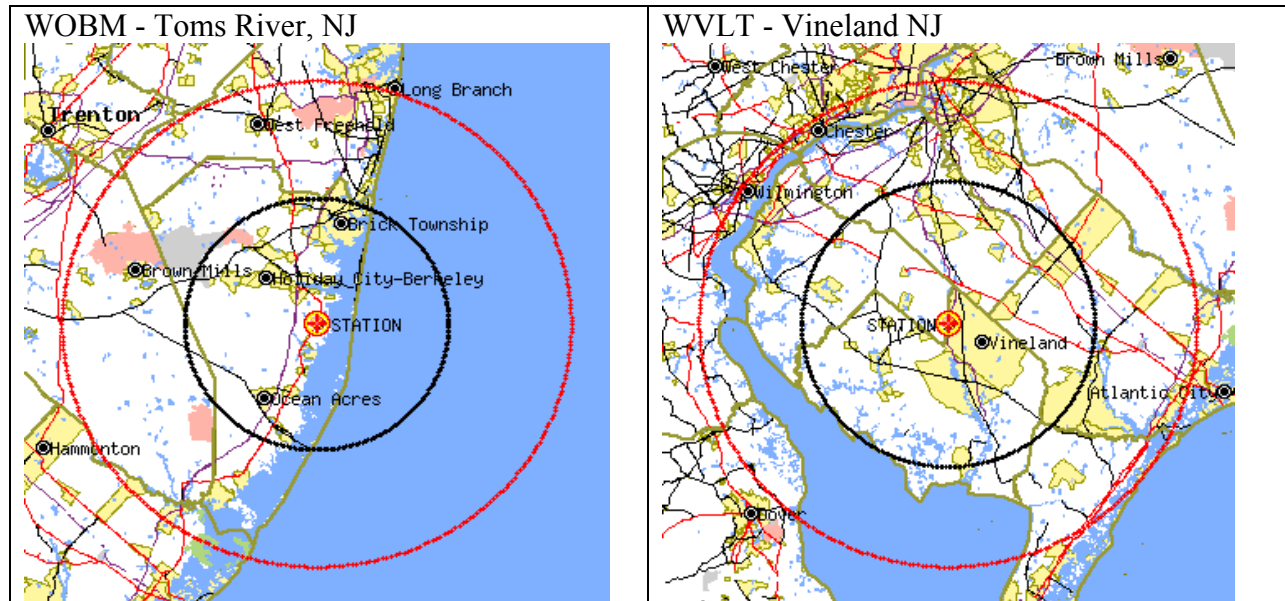


## APPENDIX C

### SERVICE CONTOURS OF SELECTED NEW JERSEY FULL POWER STATIONS COMPARED WITH LPFM "FULL FACILITY" PROTECTIONS TO THE SAME STATIONS

The black circle indicates the approximate service contour of the FM station based on actual facilities and directional antenna. This is the area protected by translator applications.

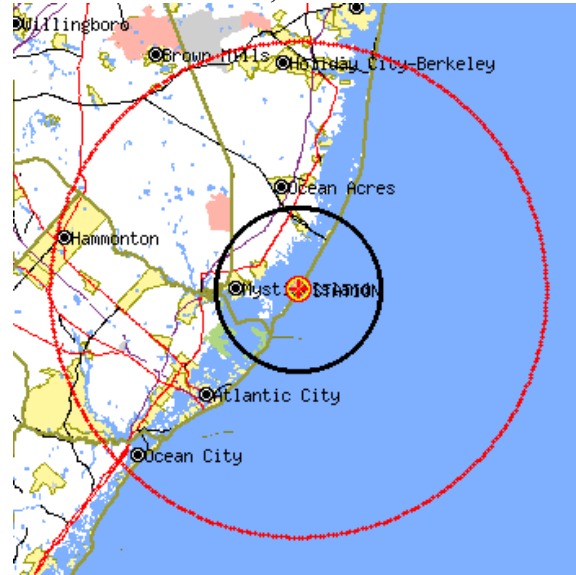
The red circle indicates the full non-directional facility plus the 20km buffer zone that is protected by LPFM stations.



WDTH - Wildwood Crest NJ



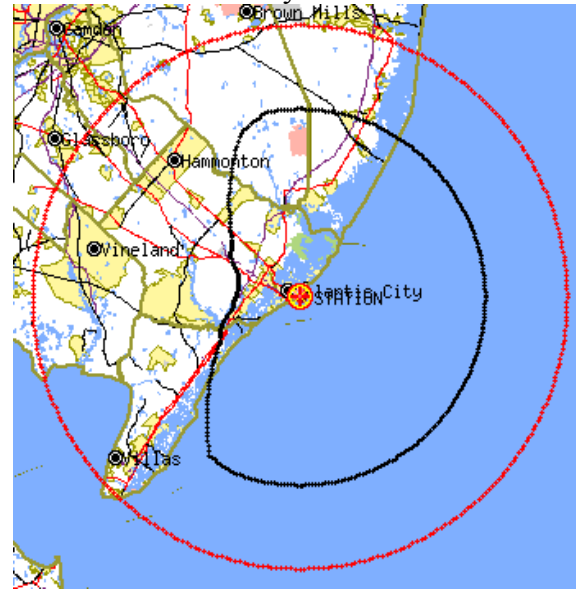
WBHX - Tuckerton, NJ



WTKU - Atlantic City NJ



WPUR - Atlantic City NJ



## **APPENDIX D**

### **AVAILABILITY OF LP-10 STATIONS IN NEW JERSEY**

NOTE:

This map was produced specifically for this proceeding. It reflects database information as of close of business Friday, October 22, 2004.

Areas that are in gray are those where LP-10 stations are currently not available, even with third adjacent channel protection.

Areas in green are currently unavailable for LP-10 but would be available without third adjacent channel protection.

Areas in white (without color) are available for LP-10, even with third adjacent channel protections.

